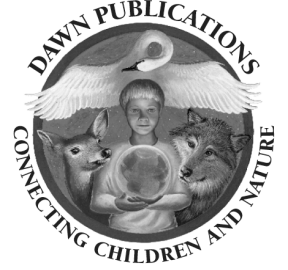


# Bee-Careful: A Game



## Introduction

In the book *If You Love Honey*, author Martha Sullivan introduces students to a meadow ecosystem. An ecosystem is a dynamic place, with plants and animals interacting in a variety of ways. In this activity, students play an active game to review some of the benefits of a healthy habitat and also some of the dangers bees must overcome in order to survive.

## Materials

- The book *If You Love Honey*
- Cones or ropes to designate area of play
- Box of ping pong balls (or other small balls), 3 per student
- Red and blue bandanas, a few of each color

### Common Core Standards (ELA K-3)

#### Reading Literature and Informational Text

- Key Ideas and Details: K.1, 1.1, 2.1, 3.1
- Integration of Knowledge and Ideas: K.7, 1.7, 2.7, 3.7

## Procedure

1. **Teacher Prep:** This game requires a large area, such as an outside playground or inside gym. Determine the boundaries of play. Designate two goals several yards apart using ropes or cones. One goal is the “flower patch” and the other is the “hive.” Place the “nectar” (a box of small balls) in the flower patch goal.
2. Read aloud *If You Love Honey*. Show children the meadow illustration under “Sweet Connections” on the “Explore More for Kids” page. Review the plants and animals mentioned in the story and discuss how they work together to create a healthy habitat.
3. Brainstorm the dangers that bees might face as they live in the meadow. Discuss some actual bee dangers including pesticides, mites, diseases, and habitat loss. Explain that a healthy habitat helps bees combat dangers.
4. Tell students that they are going to play freeze tag. Explain that they will each play a role of the meadow ecosystem: worker bees, bee dangers, healthy habitat. Select most children to be “worker bees” and have them go to the “hive” goal. Choose a few children to be “bee dangers.” Have them tie a red bandana around their arm. They should scatter along the side boundaries of the playing area. Choose a few children to represent the “healthy habitat.” Have them wear blue bandanas. They should also scatter along the side boundaries of the playing area.

5. Explain that the object of the game is for the “worker bees” to bring all of the “nectar” back to the “hive” without getting tagged by a “bee danger.” Set a time period to keep the game active and exciting. At a signal, the worker bees leave the hive and run to the flower patch. If tagged, a worker bee remains “frozen” until tagged by a “healthy habitat.” Bees run back and forth between the hive and flower patch until time is up. Children will enjoy playing multiple rounds so they can switch roles.

6. This game sets the stage for a discussion about the importance of bees and the ways people can help provide a healthy habitat for them.

### **Next Generation Science Standards (K-3)**

Disciplinary Core Idea: Life Science

- LS1: From Molecules to Organisms: Structure and Function
- LS2: Ecosystems: Interactions, Energy, and Dynamics
- LS4: Biological Evolution: Unity and Diversity

Cross-Cutting Concepts

- Patterns, cause and effect, systems and system models, stability and change



# Dances with Bees

## Introduction

In the book *If You Love Honey*, author Martha Sullivan introduces students to a meadow ecosystem. Honey bees are a key part of this ecosystem. Honey bees use a “dance” to communicate the location of a flower patch, a part of the ecosystem that is essential to their survival. In this activity students reenact bee dances to experience how bees communicate with one another.

## Materials

- The book *If You Love Honey*
- Activity Sheet “Dances with Bees” from Science NetLinks <http://sciencenetlinks.com/afterschool-resources/dances-bees/>
- One flower (real or fake) or a drawing of a flower
- Masking tape or a black board

### Common Core Standards (ELA K-3)

#### Reading Literature

- Key Ideas and Details: K.1, 1.1, 2.1, 3.1
- Integration of Knowledge and Ideas: K.7, 1.7, 2.7, 3.7

#### Reading Informational Text

- Key Ideas and Details: K.1, 1.1, 2.1, 3.1
- Integration of Knowledge and Ideas: K.7, 1.7, 2.7, 3.7

## Procedure

1. Prep: Read the activity description at Science Net Links <http://sciencenetlinks.com/afterschool-resources/dances-bees/> to set up your room.
2. Read aloud of *If You Love Honey*. Have them look for bees in each illustration and identify what they’re doing. (Note: there are some pages without any bees.)
3. Under “Explore More — For Kids,” read aloud “From Nectar to Honey” and discuss the process.
4. Refer to “Activity Instructions” at Science Net Links <http://sciencenetlinks.com/afterschool-resources/dances-bees/> and follow the directions for the activity. This game sets the stage for a discussion about the importance of bees and the ways people can help provide a healthy habitat for them.

### Next Generation Science Standards (K-3)

#### Disciplinary Core Idea: Life Science

- LS1 From Molecules to Organisms: Structure and Function
- LS2 Ecosystems: Interactions, Energy, and Dynamics
- LS4 Biological Evolution: Unity and Diversity

#### Cross-Cutting Concepts

- Patterns, cause and effect, systems and system models, stability and change



# Sweet Connections

## Introduction

In the book *If You Love Honey*, author Martha Sullivan introduces students to a meadow ecosystem. An ecosystem is a dynamic place, with plants and animals interacting in a variety of ways. Animals move through the ecosystem to meet their needs of finding food, water, shelter, and safety. In this activity, children write a story about one animal's experience as it moves around in meadow.

## Materials Needed

- ◆ The book *If You Love Honey*
- ◆ Writing and/or drawing paper, 1 sheet per student
- ◆ Colored markers or crayons, enough for all students

## Common Core Standards (ELA K-3)

- ◆ Reading: Literature
  - Key Ideas and Details K.1, 1.1, 2.1
  - Craft and Structure K.7, 1.7, 2.7
- ◆ Writing
  - Text Types and Purposes K.3, 1.3, 2.3, 3.3

## Procedure

1. Read the book aloud. Show children the meadow illustration under "Sweet Connections" on the "Explore for Kids" page. Review the plants and animals mentioned in the story. Look at the other illustrations to notice any additional animals.
2. Explain that animals move throughout their meadow ecosystem to find food, water, shelter, and safety. For example, bees fly from flower to flower gathering nectar (food) and deliver it to the hive (shelter and safety). Monarch butterfly caterpillars eat the leaves of a milkweed plant (food) and then roam around the meadow looking for a suitable place to make their chrysalis (shelter and safety).
3. Have children choose one of the meadow animals and ask them to write and illustrate a short story about the places their animal visited in the meadow. What was it doing at each place? How was it moving? What body parts allow it to move this way? What was it eating?
4. Have children share their stories with the class or in small groups. How was their animal's experience of the meadow the same or different from other animals' experiences?

## Next Generation Science Standards (DCI K-3)

- ◆ Life Science
  - LS1 From Molecules to Organisms: Structure and Function
  - LS2 Ecosystems: Interactions, Energy, and Dynamics
  - LS4 Biological Evolution: Unity and Diversity

